IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of	:	Customer Number: 46320
	:	
Gabriel MONTERO	:	Confirmation Number: 1061
	:	
Application No.: 10/026,385	:	Group Art Unit: 2142
	:	
Filed: December 21, 2001	:	Examiner: S. Willett
	:	
For: EDGE DEPLOYED DATABASE PROXY DRIVER		

APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Appeal Brief is submitted in support of the Notice of Appeal filed March 28, 2006,

and in response to the Notice of Non-Compliant Appeal Brief dated October 20, 2006, wherein

Appellant appeals from the Examiner's rejection of claims 1-9.

I. REAL PARTY IN INTEREST

This application is assigned to IBM Corporation by assignment recorded on December

21, 2001, at Reel 012408, Frame 0202.

II. RELATED APPEALS AND INTERFERENCES

Appellant is unaware of any related appeals and interferences.

III. STATUS OF CLAIMS

Claims 1-9 are pending in this Application and have been finally rejected. It is from the final rejection of claims 1-9 that this Appeal is taken.

IV. STATUS OF AMENDMENTS

The claims have not been amended subsequent to the imposition of the Final Office Action dated January 4, 2006.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Independent claims 1, 6, and 8-9 are respectively directed to a messaging system, a dynamic topic partitioning system, message system servicing method, and machine readable storage for dynamically partitioning topics into subtopics. Referring to Fig. 1 and pages 7 and 8 of Appellant's disclosure, a message publisher 102 can post messages to a selected topic in a message server 115 in a messaging system, and each subscriber 104 can receive messages from the message server 115 based upon those message topics for which the subscribers 104 have subscribed. A dynamic topic partitioning system 120 can be provided to intercept requests from publishers 102 to post messages to a selected topic and partition the selected topic into one or more subtopics. Additionally, the dynamic topic partitioning system 120 can distribute messages for the selected topic to individual ones of the subtopics.

Referring to page 9 and Fig. 2, individual ones of the subscribers 104 can retrieve messages 202 posted to the selected topic 210 in the messaging system. Each attempt to retrieve a message 202 can be intercepted by the dynamic topic partitioning system 120, and upon intercepting the message 202, the dynamic topic partitioning system 120 can determine whether

a subtopic 220 has been created for the particular subscriber 104 to the selected topic 210. If a subtopic 220 has been created, the message 202 can be retrieved therefrom within its own thread. Otherwise, the message can be retrieved directly from the selected topic 210 using a single thread. By partitioning the selected topic 210 into multiple subtopics 220, however, multiple individual threads can be allocated for each subscriber 104 retrieving messages 202 from the selected topic 210.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Claims 1, 3, 5-6, and 8-9 were rejected under 35 U.S.C. § 102 for anticipation based upon Hall, U.S. Patent No. 6,026,396; and

2. Claims 2, 4, and 7 were rejected under 35 U.S.C. § 104 for obviousness based upon Hall in view of Najmi, U.S. Patent No. 6,753,889.

VII. ARGUMENT

THE REJECTION OF CLAIMS 1, 3, 5-6, AND 8-9 UNDER 35 U.S.C. § 102 FOR ANTICIPATION BASED UPON HALL

For convenience of the Honorable Board in addressing the rejections, claims 3, 5 and 8-9 stand or fall together with independent claim 1, and claim 6 stands or falls alone.

Claims 1, 8 and 9

Hall fails to teach subtopics associated with a topic

On pages 6 and 7 of the Amendment filed November 28, 2005 (hereinafter Amendment), Appellant noted that each of independent claims 1, 6, and 8-9 introduce the concept of a plurality

of topics and a plurality of subtopics associated with the topics. To teach the claimed "plurality of topics," the Examiner cited column 5, lines 42-43 and column 11, lines 18-21 of Hall in the second Office Action dated September 28, 2005. The Examiner's first cited passage refers to "messages to be posted are put on an E-mail host 154 or 156" and the second cited passage states:

> InfoMod's logging and threading facility helps acquire entries by recording and grouping messages sent to the list. This is illustrated in FIG. 4. A thread database 400 comprises threads 410, 420, 430, etc. . . . A thread 410 (group of messages on a given topic) typically has the form "question 412, response-1 414, response-2 416, . . . "

Therefore, it is apparent that the Examiner is asserting that "thread 410 (group of messages on a given topic)" corresponds to the claimed topic.

With regard to teaching the claimed plurality of subtopics associated with a topic, the Examiner cited column 9, lines 27-28. For ease of reference, column 9, lines 6-30 of Hall is reproduced below:

> In addition to moderating the mailing list, another feature of InfoMod is it provides a web interface to its knowledge and documentation repository. For example, when a user browses to "http://ListAgentHost/home.html.", he is presented with four top-level choices:

> ---
> Welcome to the InfoMod Home Page!
> ---
> * Overview
>   What is InfoMod? And related introductory topics.
> * Queries
>   Submit a query against the knowledge base or send a
>   message to the list.
> * Knowledge Base
>   Browse the knowledge base entries directly.
> * Documentation
>   Browse documentation of InfoMod and info-infomod.
> ---

> Documentation takes the user to a directory containing standard documentation of in-depth subtopics, such as "doc/config" that describes the format and meaning of the moderator's configuration file.

As is readily apparent from this cited portion of Hall, the "subtopics" referred to be Hall have no relationship to the above-identified threads 410 (i.e., the asserted "topics"). Instead, the subtopics referred to by Hall are in "a directory of standard documentation" for a computer program named "InfoMod" (i.e., "a knowledge based E-mail list agent computer program or knowledge-based moderator," see column 5, lines 66-67).

The Examiner's response to these arguments are two-fold. First, the Examiner asserts that the plurality of topics is "a help list devoted to the topic of using InfoMod itself" and additionally cites column 6, lines 29-33 and column 9, lines 33-35 on page 2 in the statement of the rejection. Second, the Examiner, in the section entitled *"Response to Amendment,"* reiterates the assertion above and further asserts:

> Such a limited reading of the subtopics is not reasonable since clearly said subtopic is submitting "a querry against the knowledge base" which creates a subtopic, as one example of topics and subtopics.

Appellant has reviewed and re-reviewed this assertion; however, the Examiner's logic is impenetrable. In this regard, the Examiner has failed to meet the requirements of 37 C.F.R. § 1.104(c),[1] which requires that the Examiner clearly designate the teachings in Hall being relied upon or clearly explained the pertinence of Hall. For example, claim 1 recites:

> a plurality of topics stored in said at least one message server;
>
> a plurality of subtopics associated with at least one of said topics in said least one message server.

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[1] 37 C.F.R. § 1.104(c) provides:

> In rejecting claims for want of novelty or for obviousness, the examiner must cite the best references at his or her command. When a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable. The pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified.

Despite the Examiner's comments, Appellant is still unable to determine what teachings within Hall the Examiner is relying upon to allegedly, identically disclose the claimed plurality of topics and the claimed plurality of subtopics associated with at least one of the topics. Therefore, Appellant submits that the Examiner has failed to establish a prima facie case of anticipation.

The Examiner further asserts the following in the paragraph spanning pages 4 and 5 of the Final Office Action.

> The references should not be read in a vacuum, the teachings are not mutually exclusive, and must be taken in context of what was reasonable based on the subject matter as a whole as would have been understood at the time the invention was made to a person having ordinary skill in the to which the subject matter pertains. Note that reasonable "inferences", and "common sense" may be considered in formulating rejections for <u>obviousness</u> [cites omitted]. Thus, Applicant's arguments can not be held as persuasive regarding patentability. (emphasis added)

Appellant notes that these comments by the Examiner were made in response to an argument made by Appellant in addressing a rejection under 35 U.S.C. § 102. However, the case law cited by the Examiner appears to be directed to rejections under 35 U.S.C. § 103 for <u>obviousness</u>. The factual determination of anticipation under 35 U.S.C. § 102 requires the <u>identical</u> disclosure, either explicitly or inherently, of <u>each</u> element of a claimed invention in a single reference.[2] The requirement of "identical disclosure" does not leave any leeway for reasonable inferences and/or common sense. Although Appellant recognizes that an anticipation argument based upon inherency does not require the explicit disclosure of all the claimed features, the Examiner has not put forth any inherency arguments in the statement of the rejection. Therefore, Appellant submits that most of the assertions submitted by the Examiner in the paragraph spanning pages 4 and 5 are misplaced.

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[2] <u>In re Rijckaert</u>, 9 F.3d 1531, 28 USPQ2d 1955 (Fed. Cir. 1993); <u>Lindermann Maschinenfabrik GMBH v. American Hoist & Derrick Co.</u>, 730 F.2d 1452, 221 USPQ 481 (Fed. Cir. 1984).

Hall fails to teach a dynamic partitioning system partitioning the topics into subtopics

On page 7 of the Amendment, Appellant noted that the Examiner referred to column 6, lines 46-52 to teach the claimed "dynamic topic partitioning system configured to partition said at least one of said topics into said subtopics," as recited in claim 1. This cited portion of Hall is reproduced below:

> A list agent or automated moderator, in accordance with the principles of the present invention, is provided which periodically queries the ListMailHost 154 or 156 for new messages, receives the message, and (in its auto-response phase) examines its knowledge base 500 (see FIG. 5) of responses 510 in determining which of them it judges possibly relevant to the query.

This cited portion of Hall, however, fails to teach the above-identified claimed limitation. Instead, this passage cited by the Examiner discusses the use of a "list agent or automated moderator" that creates an automated reply message that is sent to a sender based upon the original message (see also column 6, lines 52-67). There is no teaching within this passage that a topic (associated with the message) is partitioned into subtopics, as claimed. Therefore, Hall fails to teach the claimed dynamic partitioning system partitioning the topics into subtopics.

The Examiner attempts to address this argument in the first full paragraph on page 5 of the Final Office Action, in which the Examiner asserts:

> Applicant suggests "this cited portion of Hall, however, fails to teach the above-identified claimed limitation", Paper Filed 11/30/05, Page 7, lines 12-14. However, the cited portion also teaches the "query" creates the subtopic as a "list." Thus, Applicant's arguments can not be held as persuasive regarding patentability.

The Examiner's assertion, however, is without factual basis. Moreover, Appellant respectfully submits that one skilled in the art would not recognize that a teaching of making a list of responses 510 that are relevant to a query, as taught by Hall, identically discloses the claimed dynamic topic partitioning system configured to partition a topic into subtopics.

Furthermore, the Examiner has failed to explain the relationship between the disclosure in column 9, lines 27-28 (i.e., "Documentation takes the user to a directory containing standard documentation of in-depth subtopics, such as 'doc/config'"), which the Examiner initially asserted identically discloses the claimed subtopics, to the above-asserted "'query' creates the subtopic as a 'list.'," which is also associated, by the Examiner, to the claimed subtopics. However, these two passages do not appear to be related in a manner that would suggest to one having ordinary skill in the art that these two passages are directed to the same teaching (i.e., subtopics).

Claim 6

Hall fails to teach a request processor

On page 8 of the Amendment, Appellant noted that the Examiner cited to column 9, line 51 through column 10, line 17, and asserted that Hall teaches:

> a request processor for processing system requests in individual threads of execution as the "five exemplary message processors" that "forward it [messages] to all list members" so that messages are "filtered out"

The request processor, as recited in claim 6, converts requests regarding selected topics to requests regarding associated subtopics in a subtopic store. As already noted by Appellant, Hall fails to teach or suggest subtopics associated with a topic. Moreover, the teachings found in column 9, line 51 through column 10, line 17 of Hall are only directed to message handling functions unrelated to the claimed converting requests as to selected topics to requests as to associated subtopics in a subtopic store.

The Examiner attempts to address this argument in the paragraph spanning pages 5 and 6 of the Final Office Action, in which the Examiner asserts:

> Applicant suggests "the teachings found in column 9, line 51 through column 10, line 17 of Hall are only directed to message handling functions ", Paper Filed 11/30/05, Page 8, lines 11-12. However, the cited portion also teaches a "Check-Knowledge-Base Handler" that enables the "query" to create or convert the subtopic as a "list". Thus, Applicant's arguments can not be held as persuasive regarding patentability.

The Check-Knowledge-Base Handler 152d disclosed by Hall, performs the function of making a list of responses that are relevant to a query (see column 10, lines 3-10), and this is essentially the same teaching that the Examiner relied upon to teach the claimed dynamic partitioning system recited in claim 1. However, the claimed dynamic partitioning system recited in claim 1 and the claimed request processor of claim 6 are directed to very different features, and the Examiner's statement of the rejection has not reconciled these differences.

Moreover, claim 6 recites that the request processor enables "message system requests to respectively post and retrieve messages to and from said associated subtopics in said subtopic store." However, the teachings in Hall only appear to be directed to retrieving responses in the message store and not to posting messages to associated subtopics in the subtopic store.

Fundamentally, the teachings of Hall and the claimed invention are directed to two very different concepts. Given the ordinary and customary associations between topics and subtopics, these claimed elements represent a hierarchical structure with the subtopics being subsidiaries of the topics. Moreover, this hierarchical structure, as recited in the claims, is directed to message storage and retrieval, in which the messages are directed to topics and subtopics. These concepts, however, are very different than the teaching of Hall, which are directed to forming a

knowledge database (see Fig. 4) in which for each question 412, a list of responses 414, 416 are provided.

Therefore, for the reasons stated above, Appellant respectfully submits that the limitations recited in claims 1, 3, 5-6, and 8-9 distinguish the claimed invention over Hall.

THE REJECTION OF CLAIMS 2, 4 AND 7 UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS BASED UPON HALL IN VIEW OF NAJMI

For convenience of the Honorable Board in addressing the rejections, claims 2, 4, and 7 stand or fall together with independent claim 1.

Claims 2, 4, and 7 depend ultimately from independent claims 1 or 6, and Appellant incorporate herein the arguments previously advanced in traversing the imposed rejection of claims 1 and 6 under 35 U.S.C. § 102 for anticipation based upon Hall. The secondary reference to Najmi does not cure the argued deficiencies of Hall. Accordingly, the proposed combination of references would not yield the claimed invention. Appellant, therefore, respectfully submits that the imposed rejection of claims 2, 4, and 7 under 35 U.S.C. § 103 for obviousness based upon Hall in view of Najmi is not viable.

Conclusion

Based upon the foregoing, Appellant respectfully submits that the Examiner's rejections under 35 U.S.C. §§ 102, 103 based upon the applied prior art is not viable. Appellant, therefore, respectfully solicits the Honorable Board to reverse the Examiner's rejections under 35 U.S.C. §§ 102, 103.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due under 37 C.F.R. §§ 1.17, 41.20, and in connection with the filing of this paper, including extension of time fees, to Deposit Account 09-0461, and please credit any excess fees to such deposit account.

Date: October 25, 2006   Respectfully submitted,

/Scott D. Paul/
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VIII. CLAIMS APPENDIX

1. A messaging system comprising:

at least one message server;

a plurality of topics stored in said at least one message server;

a plurality of subtopics associated with at least one of said topics in said at least one message server; and,

a dynamic topic partitioning system configured to partition said at least one of said topics into said subtopics, wherein

messages are posted to and retrieved from individual ones of said plurality of topics.

2. The message system of claim 1, wherein said message server is Java message service (JMS) compliant.

3. The message system of claim 1, wherein said at least one message server resides in at least one process address space.

4. The message system of claim 3, wherein said at least one process address space is a Java virtual machine.

5. The message system of claim 1, further comprising a plurality of threads of execution, each said thread hosting a process for communicating a message between one of said subtopics in said at least one message server and a message subscriber.

6. A dynamic topic partitioning system comprising:

a message interface through which message publishers can post messages to selected topics, and from which message subscribers can request messages which have been published to selected topics;

a subtopic store configured to distribute messages of said selected topics within associated subtopics; and,

a request processor in which requests to post and retrieve messages to and from individual ones of said selected topics can be converted into message system requests to respectively post and retrieve messages to and from said associated subtopics in said subtopic store, said request processor processing each of said converted message system requests in individual threads of execution.

7. The dynamic topic partitioning system of claim 6, wherein said message interface comports with the Java message service (JMS) specification.

8. A message system servicing method comprising the steps of:

intercepting message requests for a selected topic from subscribers in the message system;

associating said message requests with a plurality of subtopics created for said selected topic; and,

servicing said message requests with messages in said subtopics from within separate threads of execution for each subtopic-subscriber pair.

9. A machine readable storage having stored thereon a computer program for performing message system servicing, said computer program comprising a routine set of instructions for causing the machine to perform the steps of:

intercepting message requests for a selected topic from subscribers in the message system;

associating said message requests with a plurality of subtopics created for said selected topic; and,

servicing said message requests with messages in said subtopics from within separate threads of execution for each subtopic-subscriber pair.

IX. EVIDENCE APPENDIX

No evidence submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132 of this title or of any other evidence entered by the Examiner has been relied upon by Appellant in this Appeal, and thus no evidence is attached hereto.

X. RELATED PROCEEDINGS APPENDIX

Since Appellant is unaware of any related appeals and interferences, no decision rendered by a court or the Board is attached hereto.